

We claim:

1. A system for remotely monitoring patient variables, comprising:
 - at least one patient-worn sensor;
 - a patient-worn monitoring unit connected to the sensor;
 - said patient-worn monitoring unit comprising a processor and further comprising a wireless communication device connected to a first wireless network, wherein said first wireless network is adapted to send and receive communications over the Internet;
 - a Host data archive connected to the Internet to communicate with the patient-worn monitoring unit;
 - a second network connected to the Internet and first wireless network;
 - a terminal means connected to the second network for communication in a bi-directional manner between a medical care provider and the patient-worn monitoring unit over said second and first networks.
2. The system for remotely monitoring patient variables of claim 1, wherein the communication with the patient-worn monitoring unit is bi-directional data communication.
3. The system for remotely monitoring patient variables of claim 1 wherein the communication with the patient-worn monitoring unit is bi-directional voice communication.
4. The system for remotely monitoring patient variables of claim 2 wherein the bi-directional data communication further comprises instructions from the health care provider terminal to change configurable program instructions in the

monitoring unit processor.

5. The system for remotely monitoring patient variables of claim 4 wherein the instructions to change configurable program instructions comprises instructions to change alarm limits.
6. The system for remotely monitoring patient variables of claim 4 wherein the instructions to change configurable program instructions comprises instructions to change data collection parameters for the at least one sensor.
7. The system for remotely monitoring patient variables of claim 3 wherein the bi-directional voice communications comprises voice communications with a health care provider professional.
8. The system for remotely monitoring patient variables of claim 7 wherein the sensor further comprises a microphone for allowing voice communications.
9. The system for remotely monitoring patient variables of claim 8 wherein bi-directional voice communications occurs via the microphone and a speaker contained in the patient-worn monitoring unit.
10. The system for remotely monitoring patient variables of claim 1 wherein the second network is a PSTN.
11. The system for remotely monitoring patient variables of claim 1 wherein the sensor is a bio-sensor.
12. A method for remotely monitoring patient variables, comprising:
attaching at least one patient-worn sensor to a patient;
providing a patient-worn monitoring unit connected to the sensor, wherein said

patient-worn monitoring unit includes a processor and a wireless communication device connected to a first wireless network;

said patient-worn monitoring unit sending and receiving communications over the Internet via said first wireless network;

providing a Host data archive connected to the Internet to communicate with the patient-worn monitoring unit;

connecting a second network to the Internet and said first wireless network;

connecting a terminal to the second network for communication in a bi-directional manner between a medical care provider and the patient-worn monitoring unit over said second and first networks.

13. The method for remotely monitoring patient variables of claim 12, wherein the communication with the patient-worn monitoring unit is bi-directional data communication.
14. The method for remotely monitoring patient variables of claim 12, wherein the communication with the patient-worn monitoring unit is bi-directional voice communication.
15. The method for remotely monitoring patient variables of claim 13, wherein the bi-directional data communication sends instructions from the health care provider terminal to change configurable program instructions in the monitoring unit processor.
16. The method for remotely monitoring patient variables of claim 15, wherein the instructions sent to change configurable program instructions change alarm limits.

17. The method for remotely monitoring patient variables of claim 15, wherein the instructions sent to change configurable program instructions change data collection parameters for the at least one sensor.
18. The method for remotely monitoring patient variables of claim 14, wherein the bi-directional voice communications send and receive voice communications with a health care provider professional.
19. The method for remotely monitoring patient variables of claim 18, further comprising providing a microphone for allowing voice communications.
20. The method for remotely monitoring patient variables of claim 19, further comprising using the microphone and a speaker contained in the patient-worn monitoring unit to provide bi-directional voice communications.
21. The method for remotely monitoring patient variables of claim 12, wherein the second network is a PSTN.
22. The method for remotely monitoring patient variables of claim 12, wherein the sensor is a bio-sensor.